

ABSTRACT

Myocardial revascularization catheters and methods are provided herein. Catheters in accord with the present invention may include an outer shaft and an inner shaft where the inner shaft may be slidably and rotatably disposed in the outer shaft and the distal movement of the inner shaft may be arrested by the engagement of stops and catches located within the inner and outer shaft. Methods in accord with the current invention may include providing a therapeutic, providing a radiopaque contrast media, injecting the therapeutic through a lumen into the myocardium of the heart, and injecting the radiopaque contrast media through a lumen into myocardium of the heart. In this example, the location of the injection the radiopaque material may be chosen to indicate the injection point of the injection of the therapeutic.